

WHAT IS CLAIMED IS:

1. A neutral point voltage regulator of a torque sensor having a pair of coils exhibiting inductances changing in opposite directions based on torques and torque detecting means for outputting a torque
5 detecting voltage based on a voltage difference between a first voltage and a second voltage based on respective inductance changes of the pair of coils, the neutral point voltage regulator comprising:
 - ideal temperature-characteristic storing means arranged and constructed to store a temperature characteristic of the torque
10 detecting voltage in a neutral condition which is an ideal temperature characteristic of which a reference neutral point voltage corresponds to a reference temperature;
 - temperature detecting means arranged and constructed to detect a temperature of the torque sensor;
 - 15 regulating voltage calculating means arranged and constructed to calculate a neutral point regulating voltage based on a measured torque detecting voltage of the torque detecting means measured in neutral condition after assembly of the torque sensor;
 - a detected temperature detected by the temperature detecting means
20 when measuring the torque detecting voltage and the ideal temperature characteristic stored by the ideal temperature-characteristic storing means;
 - and
 - voltage regulating means arranged and constructed to regulate the torque detecting voltage of the torque detecting means based on the
25 neutral point regulating voltage calculated by the regulating voltage calculating means.

2. The neutral point voltage regulator of a torque sensor according to claim 1, wherein the regulating voltage calculating means obtains a calculated torque detecting voltage which corresponds to the detected temperature from the ideal temperature characteristic and
5 calculates a voltage difference between the calculated torque detecting voltage and the measured torque detecting voltage as a neutral point regulating voltage.

3. The neutral point voltage regulator of a torque sensor
10 according to claim 1, wherein the first voltage and the second voltage are voltages into which an oscillating voltage inputted to a bridge circuit composed of a pair of coils and a pair of resistances is smoothed.